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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/747,726	12/29/2003	Chung-Wen Wang	252011-1380	2029
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THOMAS, KAYDEN, HORSTEMEYER & RISLEY LLP 600 GALLERIA PARKWAY, 15TH FLOOR ATLANTA, GA 30339			EXAMINER ANDERSON, FOLASHADE	
			ART UNIT	PAPER NUMBER
			3623	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/747,726	<b>Applicant(s)</b> WANG ET AL.	
	<b>Examiner</b> FOLASHADE ANDERSON	<b>Art Unit</b> 3623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/29/2003</u> .  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. This is the first non-final office action in response to Applicant's submission filed on 12/29/2003. Currently, claims 1-21 are pending.
2. The information disclosure statement (IDS) submitted on 12/29/2003 was considered by the Examiner in the prosecution of the claims in the instant application.

### *Claim Objections*

3. Claim 14 is objected to because of the following informalities: as currently recited claim 14 (system) depends from claim 1 (method) as such is a hybrid claim not allowable under USC 101; however the Examiner believes the recited dependency is an unintentional typographical error. Therefore for purposes of examination the Examiner will assume that the Applicant intended for claim 14 to depend from claim 11. Appropriate correction is required.

### *Claim Rejections - 35 USC § 112*

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 16-21 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 16 recites "**wherein the route information records a plurality of tools**" it is unclear to the Examiner what Applicant means by records a plurality of tools. The only support for this limitation is found on pg. 7, lines

23-25. For purposes of examination this limitation will be interpreted to mean delivery route information.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 6 and 11 rejected under 35 U.S.C. 102(b) as being anticipated by Borders et al (US 7,139,721 B2).

**In regards to claim 1 Border discloses a method for capacity reservation based on historical customer delivery data, comprising the steps of:**

- **acquiring historical customer delivery data of a plurality of customers** (col. 15, lines 4-8; where the order history includes shipment data thus equivalent to delivery data);
- **classifying the customers into a plurality of different categories according to the historical customer delivery data** (col. 5, lines 50-54; where dividing customer in to groups based on shipment data is the equivalent of classifying in to categories according to delivery data) ; **and**
- **reserving production capacity for the customers in accordance with the different categories** (col. 16, lines 41-54; where the target capacity for each group is the equivalent of reserving capacity based on category).

With regards to claims 6 and 11 which are directed to the medium and system respectively for implanting the method and are almost identical to claim 1 are therefore rejected for the same reason given above.

Examiner's Side Note: While not currently recited in the claim language, the Examiner understand that in light of the specification Applicant intends for the delivery data to include delivery time requirements where delivery times include fixed, distributed and floating (instant application pg. 3, lines 17-23); however even if Applicant were to amend to include the unclaimed feature the prior would still apply. In light of the recent KSR decision the instant applicant would be an obvious deviation to the discloser of Border which allows for additional feature in "more than two factors can be utilized for determining the customer point value" (col. 15, lines 10-12) to include delivery time requirements, see KSR International Co v. Teleflex, 550 U.S. \_\_\_, 82 USPQ2d 1385 (2007).

### ***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2-5, 7-10 and 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borders et al (US 7,139,721 B2) in view of Greene (Production and Inventory Control Handbook, published 1997).

In regards to claim 2, 7, and 12 Borden discloses **wherein the historical customer delivery data** (col. 15, lines 4-8)

Borden does not expressly disclose **comprises delivery time requirements corresponding to each customer**

Official notice is taken that delivery time requirements are a part of a purchase order agreement's delivery schedule and under old and well manufacturing practices dictates that purchasing records be maintained for a period of 1 to 5 years. See Greene teachings of standard and traveling requisitions (24.8) and maintenance of order records (24.26). Therefore it was old and well known at the time the invention was made that delivery time requirements where part of historical purchasing data.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use delivery time requirements in the invention of Borders et al to provide more insight in the need and frequency for which a commodity will be purchased (Greene 24.6)

With regards to claims 7 and 12 which are directed to the medium and system for implanting the method and are almost identical to claim 2 are therefore rejected for the same reason given above.

In regards to claims 3, 8 and 13 Borders is silent on **wherein the delivery time requirements comprise requirements selected from the group consisting of fixed delivery time requirements, distributed delivery time requirements, and floating delivery time requirements.**

Official notice is taken that fixed, floating and distributed delivery time requirement types were old and well know in the art at the time the invention was made to have for example manufactures require their supplier to delivery raw material at different intervals of time based on their need as is common practice in just in time manufacturing.

It would have been obvious to one of ordinary skill in the art to used carried delivery requirements such as, fixed, floating and distributed in the intention of Borders to achieve the old and well know result of reduced inventory.

With regards to claims 8 and 13 which are directed to the medium and system for implanting the method and are almost identical to claim 3 are therefore rejected for the same reason given above.

In regards to claims 4, 9 and 14 Borders teaches designating customer groups (col. 15, lines 50-65). However Borders is silent on **wherein classification further comprises:**

- **designating customers with fixed delivery time requirements as first category customers;**
- **designating customers with distributed delivery time requirements as second category customers; and**
- **designating customers with floating delivery time requirements as third category customers**

Official notice is taken that fixed, floating and distributed delivery time requirement types were old and well know in the art at the time the invention was made to have for

example manufactures require their supplier to delivery raw material at different intervals of time based on their need as is common practice in just in time manufacturing. Borders allows for group scoring to be based on criteria other than that explicitly expressed in the example of his disclosure (Borden col. 15, lines 10-12).

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the scoring criteria to one based on delivery requirements in the disclosure of Borders to be able to provide support for a just in time manufacturing system.

With regards to claims 9 and 14 which are directed to the medium and system for implanting the method and are almost identical to claim 4 are therefore rejected for the same reason given above.

In regards to claims 5, 10 and 15 Borders discloses **wherein reservation further comprises:**

- **reserving capacity for the first category customers** (col. 16, lines 41-53 and fig. 10);
- **reserving the first remaining capacity for the second category customers** (col. 16, lines 41-53 and fig. 10);
- **reserving the second remaining capacity for the third category customers** (col. 16, lines 41-53 and fig. 10);

Borders does not expressly teach expressly teach calculating **a first remaining capacity** or **calculating a second remaining capacity**; however since the capacity is shown as a percentage calculation is implied.



With regards to claims 10 and 15 which are directed to the medium and system for implanting the method and are almost identical to claim 3 are therefore rejected for the same reason given above.

Claims 16-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Borders et al (US 7,139,721 B2) in view of Shekar et al (US Publication 2003/0208392)

In regards to claim 16 Borden teaches a **system of demand and capacity management, comprising a capacity model having route information for the product, wherein the route information records a plurality of tools** (col. 7, lines 7-11).

However Borders does not teach :

- **an allocation planning module configured to receive a demand plan for a product from a participating customer** (0034);
- **a capacity management module configured to reserve capacity according to the demand plan** (0106; where capacity exception is the equivalent of reserving capacity).

Shekar teaches in an analogous art:

- **an allocation planning module configured to receive a demand plan for a product from a participating customer** (0034);
- **a capacity management module configured to reserve capacity according to the demand plan** (0106; where capacity exception is the equivalent of reserving capacity).

It would have been obvious to one of ordinary skill in the art to use the disclosure of Shekar in the invention of Borders to optimize resource plans across multiple networks.

Claim 17 which is directed to the system for implanting the method of calim1 and is almost identical to claim 1 is therefore rejected for the same reason given above in regards to claim 1.

Claim 18 which is directed to the system for implanting the method of calim1 and is almost identical to claim 2 is therefore rejected for the same reason given above in regards to claim 2.

Claim 19 which is directed to the system for implanting the method of calim1 and is almost identical to claim 3 is therefore rejected for the same reason given above in regards to claim 3.

Claim 20 which is directed to the system for implanting the method of calim1 and is almost identical to claim 4 is therefore rejected for the same reason given above in regards to claim 4.

Claim 21 which is directed to the system for implanting the method of calim1 and is almost identical to claim 5 is therefore rejected for the same reason given above in regards to claim 5.

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Wang et al (US Publication 2005/0038684) copending application with a common assignee teaches the limitations of claim 16.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FOLASHADE ANDERSON whose telephone number is (571)270-3331. The examiner can normally be reached on Monday through Thursday 8:00 am to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Beth Van Doren can be reached on (571) 272-6737. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Folashade Anderson/  
Examiner, Art Unit 3623

/Beth Van Doren/  
Supervisory Patent Examiner, Art Unit 3623